8900292

TO ALL TO WHOM THESE: PRESENTS SHAML COME:

Northrup King Co.

Colherens, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE; IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLI-CANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EX-CLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, PORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT Y THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT

1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

169951

In Lestimony Whereof, I have hereunto set my hand and caused the seal of the Blant Variety Protection Office to be affixed at the City of Washington, D. C. 30th day of April the year of our Lord one thousand nine hundred and ninety-one.

Plant Variety Protection Office ultural Marketing Service

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Office, OIRM, Room 404-W, Washington, D.C. 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0581-0055), Washington, 20250. FORM APPROVED: OMB 0581-0055, Expires 1/31/91

U.S. DEPARTMENT OF A AGRICULTURAL MARKE	Application is required in order to determine if a plant variety protection		
APPLICATION FOR PLANT VARIET	certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).		
NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATION OF EXPERIMENTAL NO.	3. VARIETY NAME
Northrup King Company	6995		
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP)		5. PHONE (include area code)	FOR OFFICIAL USE ONLY
			PVPO NUMBER
P. O. Box 959			8900392
Minneapolis, MN 55440		612-593-7333	F Date
			aug 17, 1989
6. GENUS AND SPECIES NAME	7. FAMILY NAME (Botan	ical)	Time /
Glycine max	Legumino	sae	G 1130 A.M. DP.M.
8. CROP KIND NAME (Common Name)	9.	DATE OF DETERMINATION	F Filling and Examination Fee:
Soybean		January, 1987	S Date
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGA	NIZATION (Corporation, pa	tnership, association, etc.)	- Gug 17 1989
Corporation			C Certificate Fee:
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		ATE OF INCORPORATION	= s 250,
Delaware	19)76	Date Date D Mar. 25, 1991
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO	SERVE IN THIS APPLICATI	ON AND RECEIVE ALL PAPERS	
Warren D. Springer			
Northrup King Co. P. O. Box 959			
Minneapolis, MN 55440			odel: 612-593-7285
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Foil	ow INSTRUCTIONS on reve	PHONE (Include area c	ode): U12 U30 / 200
a. X Exhibit A, Origin and Breeding History of the Variety.			
b. X Exhibit B, Novelty Statement.			
c. X Exhibit C. Objective Description of Variety.			
d. X Exhibit D, Additional Description of Variety e. X Exhibit E, Statement of the Basis of Applicant's Ownersh	i a		
Seed Sample (2,500 viable untreated seeds). Date Seed		Variety Protection Office	
g X Filing and Examination Fee (\$2,150) made payable to "T			
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SO Protection Act.)	LD BY VARIETY NAME ONL	Y AS A CLASS OF CERTIFIED SEED?	See section 83(a) of the Plant Variety
YES (If "YES," answer items 16 and 17 be		O," skip to item 18 below)	
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS NUMBER OF GENERATIONS?	TO 117. IF "YES" T	O ITEM 16, WHICH CLASSES OF PROD	DUCTION BEYOND BREEDER SEED?
TES NO	Foo	INDATION REGIS	STERED CERTIFIED
18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VA	RIETY IN THE U.S.?		
YES (If "YES," through Plant Variety Protection Act	Palent Act. Give da	te:	
X NO		* .	
19 HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR M	ARKETED IN THE U.S. OR	THER COUNTRIES?	
YES (If "YES," give names of countries and dates)	INCIDENTIAL OUTS ON	Strich Codiernics	
NO NO	U.S.A.,	January, 1989	
		· · · · · · · · · · · · · · · · · · ·	
20. The applicant(s) declare(s) that a viable sample of basic serequest in accordance with such regulations as may be appli-		be furnished with the applicat	ion and will be replenished upon
The undersigned applicant(s) is (are) the owner(s) of this		novel plant variety, and belie	ve(s) that the variety is distinct.
uniform, and stable as required in section 41, and is entitle	d to protection under t	he provisions of section 42 of the	
Applicant(s) is (are) informed that false representation here	ein can jeopardize prot	ection and result in penalties.	
SIGNATURE OF APPLICANT (Owner(s))	CAPACITY OR		DATE
Warren Springer		Manager,	22 March 1991
SIGNATURE OF APPLICANT (Owner(s))	CAPACITY OR	atory Affairs	DATE
The state of the s	John Adit i On		

FORM CSSD-470 (5-89) Edition of FORM LS-470, 3-86, is obsolete.

EXHIBIT A

ORIGIN AND BREEDING HISTORY OF THE SOYBEAN VARIETY 6995

The soybean variety 6995 is derived from the cross Bedford x Coker 156 which was made in 1976 by the Coker soybean breeding staff at Hartsville, SC. The F_1 was advanced to the F_2 generation at Hartsville in 1977, and the F_2 and F_3 generations were advanced by single seed descent in the field (1978) and greenhouse (winter 1978-79) at Hartsville. The F_{λ} generation was grown in the field in 1979 and seed was harvested from single plant selections. Resulting F, progeny were screened for resistance to races 3 and 4 of soybean cyst nematode during the winter 1979-80. Resistance F_5 progeny were planted in the field in 1980, and row, PR #118, was selected at harvest for further evaluation for yield and other agronomic traits. In 1981, resistance to cyst nematodes was confirmed in field trials at Hartsville and at the USDA Regional Laboratory in Jackson, TN. PR #118 was given the experimental number Co 82-372 and entered in various yield trials in the midsouth and southeast from 1982-84. Also during this time, the description traits of white flowers, tawny pubescence, tan pods, and seed with a black hilum were confirmed. The line was also found to be resistant to race 1 of Phytophthora root rot. From 1985-88, Co 82-372 was evaluated in advanced yield trials across a wide range of environments and released as 6995 in January, 1989.

Breeder's seed was produced as a bulk from intensely rogued progeny rows in 1987. Foundation seed was produced and certified by the Arkansas State Plant Board in 1988. Varietal purity will be maintained via a progeny row system as needed.

6995 is a uniform and stable variety except that it may contain tall off-type plants with a frequency of 1/50,000. In seven years of testing and four years of seed increase, we have observed no other variation except for minor environmentally induced variation in intensity of hilum color.

EXHIBIT B

Novelty Statement for Soybean Variety '6995'

Soybean variety '6995' is most similar to the variety 'Bedford'. It can be differentiated from 'Bedford' on the basis of resistance to southern root knot nematode (Meloidogyne incognita). '6995' is resistant and 'Bedford' is susceptible.

3

EXHIBIT C (Soybean)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY

SOYBEA	AN (Glycine max L.)	
NAME OF APPLICANT(S)	TEMPORARY DESIGNATI	ON VARIETY NAME
Northrup King Co.	Co 82-372	6995
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code	9)	FOR OFFICIAL USE ONLY
Northrup King Co. Attention:	R.W. Romig	PVPO NUMBER
P.O. Box 959 Minneapolis, MN 55440		8900292
Choose the appropriate response which characterizes the var.	iety in the features descri	and below. When the number of significant digita
in your answer is fewer than the number of boxes provided,	place a zero in the first bo	ox when number is 9 or less (e.g., 0 9)
Starred characters * are considered fundamental to an adequ	iate sovbean variety descr	intion Other characters should be described
when information is available.	,	-proof. Comer construction broads by described
1. SEED SHAPE:		
	T	
1 = Spherical (L/W, L/T, and T/W ratios = < 1.2) 3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)		ned (L/W ratio > 1.2; L/T ratio = < 1.2) ned (L/T ratio > 1.2; T/W > 1.2)
2. SEED COAT COLOR: (Mature Seed)		
	1 4 4 A	
1 = Yellow 2 = Green 3 = Brown	4 = Black 5 = Ot	her (Specify)
3. SEED COAT LUSTER: (Mature Hand Shelled Seed)		<u> </u>
3. SEED COAT EUSTER: (Mature Hand Shelled Seed)	the state of the s	en de la companya de
1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebso	y'; 'Gasoy 17')	
4. SEED SIZE: (Mature Seed)		· · · · · · · · · · · · · · · · · · ·
1 2 Grams per 100 seeds		
5. HILUM COLOR: (Mature Seed)		
6 1 = Buff 2 = Yellow 3 = Brown 4	= Gray 5 = Imperfect	Black 6 = Black 7 = Other (Specify)
6. COTYLEDON COLOR: (Mature Seed)		
. []		
1 1 = Yellow 2 = Green		
7. SEED PROTEIN PEROXIDASE ACTIVITY:		
1 = Low 2 = High		and the second of the second o
8. SEED PROTEIN ELECTROPHORETIC BAND:		
o. SEED FROTEIN ELECTROPHORETIC BAND:	•	•
2 1 = Type A (SP1 ^a) 2 = Type B (SP1 ^b)	er e	
9. HYPOCOTYL COLOR:		
1 = Green only ('Evans'; 'Davis') 2 = Green with 3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71') 4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'O	bronze band below cotyledo Coker Hampton 266A')	ns ('Woodworth'; 'Tracy')
10. LEAFLET SHAPE:		
3 1 = Lanceolate 2 = Oval 3 = Ovate	4 = Other (Specify)_	

11. LEAFLE	IT SIZE:
2	1 = Small ('Amsoy 71'; 'A5312') 2 = Medium ('Corsoy 79'; 'Gasoy 17') 3 = Large ('Crawford'; 'Tracy')
12. LEAF C	n de la companya de La companya de la co
	1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton') 3 = Dark Green ('Gnome'; 'Tracy')
2	
13. FLOWE	R COLOR:
y	1 = White 2 = Purple 3 = White with purple throat
T 14. POD CO	LOR:
	1 = Tan 2 = Brown 3 = Black
15. PLANT	PUBESCENCE COLOR:
	1 = Gray 2 = Brown (Tawny)
· 4	to the first the second of the
16. PLANT 7	YPES:
	1 = Slender ('Essex'; 'Amsoy 71') 2 = Intermediate ('Amcor'; 'Braxton') 3 = Bushy ('Gnome'; 'Govan')
	ABIT:
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	I = Determinate ('Gnome'; 'Braxton') 2 = Semî-Determinate ('Will')
	3 = Indeterminate ('Nebsoy'; 'Improved Pelican')
18. MATURI	TY GROUP:
1 (1 2 2 1	1=000 2=00 3=0 4=I 5=II 6=III 7=IV 8=V
19. DISEASE	REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)
BACTE	RIAL DISEASES:
★ 2 .	Bacterial Pustule (Xanthomonas phaseoli var. sojensis)
	acterial Blight (Pseudomonas glycinea)
رکا ۲	Jildfire (Pseudomonas tabaci) se menengen at megafiske menengen seken teknologien begin betier bestemblig i de Henne seken bestemblig bestembligte detection hen bestemblig bestemblig bestemblig bestemblig i (1777) bestemblig
FUNGAL	DISEASES:
× 1 =	rown Spot (Septoria glycines)
F.	rogeye Leaf Spot (Cercospora sojina)
★ 0 R	ace 1 0 Race 2 0 Race 3 0 Race 4 0 Race 5 0 Other (Specify)
ОТ	arget Spot (Corynespora cassiicola)
ه آق	owny Mildew (Peronospora trifoliorum var. manshurica)
1 P	owdery Mildew (Microsphaera diffusa)
. 	rown Stem Rot <i>(Cephalosporium gregatum)</i>
:: <u> </u>	em Canker (Diaporthe phaseolorum var. caulivora)
	The state of the s

19	DISEA	SE REACTION	N: (Enter 0 = Not 7	ested; 1 = Susceptible; 2 =	Resistant) (Continued)	and the second seco	enter (n. 1900). De state de la companya de la comp			
	FUN	GAL DISEASE	ES: (Continued)							
*	1	Pod and Stem Blight (Diaporthe phaseolorum var; sojae)								
	1	Purple Seed Stain (Cercospora kikuchii)								
	0	Rhizoctonia	Root Rot (Rhizoct	onia solani)						
		Phytophthor	a Rot (Phytophthol	ra megasperma var. sojae)						
*	2	Race 1	2 Race 2	0 Race 3 1	Race 4 0 Race 5	0 Race 6	0 Race 7			
	0	Race 8	Race 9	Other (Specify)						
	VIRA	RAL DISEASES:								
	0	Bud Blight (Tobacco Ringspot Virus)								
	0		ic (Bean Yellow Mo							
*			aic (Cowpea Chloro	·						
			Bean Pod Mottle Vi							
*			Soybean Mosaic Vi							
	NEM.	ATODE DISEA	• •	iusy						
	142101		t Nematode <i>(Hetero</i>	odora atuainaal		÷				
★	1	Race 1	1 Race 2	2 Race 3 2	Race 4 1 Other (Specify) Race 5				
		L	ode <i>(Hoplolaimus C</i>	لبسا " اسا	Mace 4	Specify)				
*		Southern Root Knot Nematode (Meloidogyne incognita)								
` •		Northern Root Knot Nematode (Meloidogyne Hapla)								
7		Peanut Root Knot Nematode (Meloidogyne arenaria)								
	붜	Reniform Nematode (Rotylenchulus reniformis) OTHER DISEASE NOT ON FORM (Specify): Javenese Nematode (Meloidogyne Javanica)								
	2	OTHER DISE	ASE NOT ON FOR	NW (Specify):	(11020	aogymo oaveniewy				
20.	PHYSIO	LOGICAL RE	SPONSES: (Enter	0 = Not Tested; 1 = Suscept	ible; 2 = Resistant)					
*	0	Iron Chlorosis	on Calcareous Soil							
	1	Other (Specify	// <u>Metribuzi</u>	in Herbicide						
21.	INSECT	REACTION:	(Enter 0 = Not Test	ted; 1 = Susceptible; 2 = Re	sistant)					
	0	Mexican Bean	Beetle (Epilachna v	rarivestis)	The Control of the State of the		Carry 110 to			
	0	Potato Leaf H	opper (<i>Empoasca fa</i>	abae)	Sharpen in the first of		·			
	Other (Specify)									
22.	INDICAT	TE WHICH VA	RIETY MOST CLO	SELY RESEMBLES THAT	SUBMITTED.					
	CHAR	ACTER	NAME	OF VARIETY	CHARACTER	NAME OF V	'ARIETY			
ŗ	Plant Sha	ре	Coker 15	6	Seed Coat Luster	Coker 156				
.:	_eaf Shap	De	Bedford		Seed Size	Coker 156				
ŀ	_eaf Colo	or	Bedford		Seed Shape	Bedford	E 1273			
L	_eaf Size		Bedford		Seedling Pigmentation	Coker 156	15 1.2 (1.2 (1.2 (1.2 (1.2 (1.2 (1.2 (1.2			
Q.1		a a sa a sa a sa a sa a s		The state of the second second	Li i i i i i i i i i i i i i i i i i i					

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100	NO. SEEDS/
				CM Width	CM Length	% Protein	% Oil	SEEDS	POD
6995 Submitted	138	1.9	86	11.4	6.0	39.31	22.90	11.6	2/3
Bedford Name of Similar Variety	138	2.8	91	11.2	5.4	39.26	22.61	12.5	2/3

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
- 2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
 - 3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A₂ in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
 - 4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

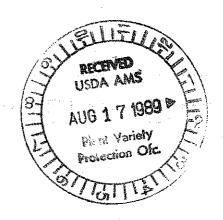


EXHIBIT D

ADDITIONAL DESCRIPTION OF THE VARIETY 6995 SOYBEANS

6995 is a late-group V soybean variety, maturing 2 days earlier than Coker 485. Tests conducted by Mobay Chemical Corporation indicate that 6995 is "sensitive" to Metribuzin herbicide.

EXHIBIT E

STATEMENT OF THE BASIS OF APPLICANT'S OWNERSHIP OF 6995

Soybean variety 6995 was developed by the soybean breeding staff of Coker Pedigreed Seed Company which was purchased by Northrup King Co. in July 1988. The germplasm used in development of 6995 is cited in Exhibit A of this application. Northrup King Co. believes the variety is novel as defined by the Plant Variety Protection Act; and therefore, that Northrup King Co. is sole owner of the variety.